

Application No.: 10/769,532
Amendment and Response dated June 28, 2007
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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the subject application, and please amend the claims as follows:

Claim 1. (Currently amended): A graft comprising:
a graft body section having a proximal end, a distal end, and defining at least one inflatable porous channel;
at least one inflatable porous cuff disposed at the proximal or distal end of the graft body section and in fluid communication with the at least one channel; and
an inflation medium including at least one therapeutic agent configured to be introduced into the inflatable channel;
wherein the inflation medium comprises a curable liquid.

Claim 2. (Original): The graft of claim 1 wherein the agent is capable of being transported from the inflation medium through a wall of the porous channel and released into a body lumen.

Claim 3. (Original): The graft of claim 2 wherein the agent is configured to be released into the body lumen from a luminal or abluminal surface of the graft body section.

Claim 4. (Original): The graft of claim 2 wherein the porous channel has varying levels of porosity.

Claim 5. (Original): The graft of claim 2 wherein the graft body section comprises one or more materials selected from the group consisting of a fluoropolymer, a polyethyleneterephthalate, a polyvinylchloride, a polyurethane, a polyolefin, and a polyamide.

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Claim 6. (Original): The graft of claim 2 wherein the graft body section comprises expanded or perforated polytetrafluoroethylene.

Claim 7. (Original): The graft of claim 2 wherein a quantity of the agent releasable into the body lumen ranges from about 10 micrograms to about 100 milligrams.

Claim 8. (Original): The graft of claim 2 wherein the therapeutic agent is configured to be transported into the body lumen in a time period ranging from about seven days to about twelve months.

Claim 9. (Original): The graft of claim 2 wherein the at least one therapeutic agent comprises one or more agents selected from the group consisting of an endothelialization promoting agent, an angiogenesis promoting agent, an anti-thrombotic agent, an anti-aneurysmal agent, an anti-infection agent, an anti-inflammatory agent, an anti-restenosis agent, a chemotherapeutic agent, and an anti-cancer agent.

Claim 10. (Original): The graft of claim 2 wherein the inflation medium comprises a therapeutic agent-carrying host polymer.

Claim 11. (Original): The graft of claim 10 wherein the therapeutic agent is capable of being released by diffusion through the host polymer.

Claim 12. (Original): The graft of claim 10 wherein the therapeutic agent is capable of being released by degradation of the host polymer.

Claim 13. (Original): The graft of claim 10 wherein the graft body section comprises biocompatible material capable of inhibiting transport of a bulk of the host polymer.

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Claim 14. (Original): The graft of claim 10 wherein the host polymer is capable of being introduced into the inflatable channel before, during, or after graft deployment or implantation.

Claim 15. (Original): The graft of claim 10 wherein the host polymer comprises one more materials selected from the group comprising polyethylene glycol, polyethylene glycol diacrylate, ethoxylated trimethylolpropane triacrylate, pluronic polyoxymer, acrylamide, polyethylene oxide, polypropylene oxide, polyvinyl alcohol, polyethylene-co-vinyl alcohol, polyacrylic acid, polyethylene-co-acrylic acid, polyethyloxazoline, polyvinyl pyrrolidone, polyethylene-co-vinyl pyrrolidone, polymaleic acid, polyethylene-co-maleic acid, polyacrylamide, and polyethylene oxide-co-polypropylene oxide.

Claim 16. (Canceled)

Claim 17. (Canceled)

Claim 18. (Original): The graft of claim 17 wherein the inflation medium has a cure time ranging from about three minutes to about twenty minutes and a post-cure elastic modulus ranging from about 50 psi to about 400 psi.

Claim 19. (Original): The graft of claim 1 wherein the channel comprises one or more features selected from the group consisting of helical spirals, longitudinal channels, and circumferential rings.

Claim 20. (Canceled)

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Claim 21. (Original): A graft comprising:
a graft body section having a proximal end, a distal end, and defining at least one inflatable porous channel therebetween;
a connector member affixed to the proximal or distal end of the graft body section, the connector member comprising one or more connector elements;
a stent comprising one or more proximal stent connector elements coupled to the one or more connector member connector elements; and
an inflation medium including at least one therapeutic agent configured to be introduced into the inflatable channel.

Claims 22-35 (Canceled)

Claim 36. (New): The graft of claim 21, wherein the inflation medium comprises a curable liquid.

Claim 37. (New): The graft of claim 21, wherein the inflation medium comprises one or more materials selected from the group comprising polyethylene glycol, polyethylene glycol diacrylate, ethoxylated trimethylolpropane triacrylate, pluronic polyoxymer, acrylamide, polyethylene oxide, polypropylene oxide, polyvinyl alcohol, polyethylene-co-vinyl alcohol, polyacrylic acid, polyethylene-co-acrylic acid, polyethyloxazoline, polyvinyl pyrrolidone, polyethylene-co-vinyl pyrrolidone, polymaleic acid, polyethylene-co-maleic acid, polyacrylamide, and polyethylene oxide-co-polypropylene oxide.

Claim 38. (New): The graft of claim 21, wherein the inflation medium is selected from the group consisting of polyethylene glycol diacrylate, ethoxylated trimethylolpropane triacrylate, or polypropylene glycol diacrylate in combination with pentaerythritol tetra 3 (mercaptopropionate).

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Claim 39. (New): A graft comprising:

a graft body section having a proximal end, a distal end, and defining at least one inflatable porous channel;

at least one inflatable porous cuff disposed at the proximal or distal end of the graft body section and in fluid communication with the at least one channel; and

an inflation medium including at least one therapeutic agent configured to be introduced into the inflatable channel;

wherein the inflation medium comprises a curable liquid; and

wherein the curable liquid is selected from the group consisting of polyethylene glycol diacrylate, ethoxylated trimethylolpropane triacrylate, or polypropylene glycol diacrylate in combination with pentaerthyritol tetra 3 (mercaptopropionate).

Claim 40. (New) The graft of claim 10 wherein the host polymer comprises one more materials selected from the group consisting of polyethylene glycol diacrylate, ethoxylated trimethylolpropane triacrylate, or polypropylene glycol diacrylate in combination with pentaerthyritol tetra 3 (mercaptopropionate).